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DAVID S. ROSENZWEIG
E-mail: drosen@kwplaw.com

March 9, 2004

Mary Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2nd Floor
Boston, Massachusetts 02110

Re: NSTAR Electric, D.T.E. 03-121

Dear Secretary Cottrell:

Enclosed for filing in the above-referenced matter is an original and six (6) copies of NSTAR Electric's responses to the Information Requests on the accompanying list.

Thank you for your attention to this matter.

Very truly yours,

David S. Rosenzweig

Enclosures

cc: William Stevens, Hearing Officer
John-Cope Flanagan, Hearing Officer
Service List

Response to Information Requests

Information Request DOER-1-1
Information Request DOER-1-2
Information Request DOER-1-3
Information Request DOER-1-5
Information Request DOER-1-6
Information Request DOER-1-7
Information Request DOER-1-8
Information Request DOER-1-9
Information Request DOER-1-10
Information Request DOER-1-11
Information Request DOER-1-12
Information Request DOER-1-13
Information Request DOER-1-14
Information Request DOER-1-15
Information Request DOER-1-16
Information Request DOER-1-17
Information Request DOER-1-18
Information Request DOER-1-19
Information Request DOER-1-20
Information Request DOER-1-21
Information Request DOER-1-22
Information Request DOER-1-23

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Boston Edison Company Cambridge Electric Light Company Commonwealth Electric Company d/b/a NSTAR Electric	)	D.T.E. 03-121

CERTIFICATE OF SERVICE

I certify that I have this day served the foregoing documents upon the service list in the above-docketed proceeding in accordance with the requirements of 220 C.M.R. 1.05.

Stephen H. August

Stephen H. August, Esq.
Keegan, Werlin & Pabian, LLP
265 Franklin Street
Boston, MA 02110
(617) 951-1400

Dated: March 9, 2004

Information Request DOER-1-1

Please provide a copy of each and every report submitted to the Department beginning with the year-1997, for the Department's Annual Report Concerning Self-Generation. Please provide all related information used to produce those reports, including Company e-mails, memos, minutes, agendas, calculations, or other notes created in preparation for or during Company meetings.

Response

Please see Attachments DOER-1-1(a) through (e) for the Company's Annual QF Report. The first report was submitted to the Department for the year 1998 (i.e., there is no 1997 report). Please note that the attachments do no include the names and addresses of the customers in order to protect the privacy interests of those customers.

D.T.E. 03-121
Attachment DOER-1-1 (a)

NSTAR ELECTRIC

Boston Edison Company
Cambridge Electric Light Company
Commonwealth Electric Company

Report of Activities of Qualifying Facilities and On-Site Generating Facilities January 1, 2002 through December 31, 2002

1. In compliance with 220 CMR 8.07, each Distribution Company, shall file with the Department of Telecommunications and Energy ("Department") a report of new Qualifying Facility and On-Site Generating Facility activity in a calendar year, by April of the subsequent year. Such filing shall include:

   a) The name and address of the owner, and the address where the Qualifying Facility or On-Site Generating Facility is located;

   b) A brief description of the type of Qualifying Facility or On-Site Generating Facility;

   c) The primary energy source used by the Qualifying Facility or On-Site Generating Facility;

   d) The date of installation and on-line date;

   e) The method of delivering power to the Distribution Company (contract or net metering);

   f) The design capacity of the Qualifying Facility or On-Site Generating Facility;

   g) A brief discussion identifying any Qualifying Facility or On-Site Generating Facility that was denied interconnection by the Distribution Company, including a statement of reasons for such denial.

Responses 1(a), (b), (c), (d), (e), (f):

Boston Edison Company activity during calendar year 2002:

[redacted]

a) [redacted]
b) Photovoltaic
c) Solar
d) Installed date: August 2002, On-Line date: August, 2002
e) Net Metering
f) 3.3 kW

[redacted]

a) [redacted]
b) Photovoltaic
c) Solar
d) Installed date: December 2002, On-Line date: December 2002
e) Net Metering
f) 5.4 kW

[redacted]

a) [redacted]
b) Photovoltaic
c) Solar
d) Installed date: November 2002, On-Line date: December 2002
e) Net Metering
f) 2.0 kW

[redacted]

a) [redacted]
b) Photovoltaic
c) Solar
d) Installed date: August 2002, On-Line date: August 2002
e) Net Metering
f) 5.0 kW

[redacted]

a) [redacted]
b) Photovoltaic
c) Solar
d) Installed date: December 2002, On-Line date: December 2002
e) Net Metering
f) 20 kW

[redacted]

a) [redacted]
b) Induction generator
c) Natural Gas
d) Installed date: December 2002, On-Line date: December 2002
e) None
f) (2) 35 kW

Cambridge Electric Light Company activity during calendar year 2002:
No new activity during 2002

Commonwealth Electric Company activity during calendar year 2002:

[redacted]

a) [redacted]
b) Microturbine
c) Natural Gas
d) Installed date: August 2002, On-Line date: August 16, 2002
e) No Energy Sale
f) (2) 30 kW

Response 1(g)
No Qualifying facility or On-Site Generating facility was denied interconnection by NSTAR

2. Each Distribution Company shall file with the Department a report describing the incremental reductions in the purchases of electricity during a calendar year due to customer operations of, or purchases from, On-Site Renewable Technologies; Fuel Cells; Cogeneration Equipment; On-site Generating Facilities eligible for net metering; or Cogeneration Facilities of 60 kW or less which are eligible for net metering. Such filing shall be submitted to the Department by April 1 of the subsequent year, and it shall include:

   a) A brief description of the incremental reductions in purchases of electricity during the calendar year due to customer operations of:

      1. On-Site Renewable Energy Technologies;

      2. Fuel Cells;

      3. Cogeneration equipment with a combined heat and power system efficiency of at least 50% base

on the higher value of the fuel used in the system;

4. On-Site Generation Facilities eligible for net metering; or

5. Cogeneration Facilities of 60 kW or less which are eligible for net metering.

b) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's transition charge, including a quantitative estimate of the lost dollar contribution to the Distribution Company's transition charge during the calendar year;

c) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's kilowatt hour sales during the calendar year;

d) An estimate of the percent of the Distribution Company's gross annual revenues that have been lost during the calendar year due to 220 CMR 8.07 (2)(a);

e) A brief narrative identifying all customers that have given notice to the Distribution Company of their plans to reduce electricity purchases.

Responses 2(a), (b), (c), (d):

Please refer to Attachment A for a listing of customer facilities and estimated incremental reductions in purchases for Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company.

Response 2(e):

Boston Edison Company:

Boston Edison Company is aware of the following eleven (13) active customer proposals:

[redacted]

Currently installing (1) 75 kW cogeneration unit to be supplied by Natural Gas, to be used as a network BETA test site.

[redacted]

Currently evaluating the installation of 10 MW of cogeneration to be supplied by Natural Gas.

[redacted]

Currently on-hold pending ENRON bankruptcy resolution, with the installation of 1.5 MW of cogeneration to be supplied by Natural Gas.

[redacted]

Currently on-hold pending ENRON bankruptcy resolution, with the installation of 3.0 MW of cogeneration to be supplied by Natural Gas.

[redacted]

Currently on-hold pending ENRON bankruptcy resolution, with the installation of 4.5 MW of cogeneration to be supplied by Natural Gas.

[redacted]

2-200W Fuel Cells to be installed as a manufacturer's test site, to be supplied by Natural gas.

[redacted]

Customer plans to install (1) 60 kW cogen unit to be supplied by natural gas.

[redacted]

Customer plans to install (1) 75 kW cogen unit to be supplied by natural gas.

[redacted]
Customer plans to install (1) 60 kW cogen unit to be supplied by natural gas.

[redacted]
Customer plans to install (1) 75 kW cogen unit to be supplied by natural gas. Installation time frame dependent on the results of the network BETA test site.

[redacted]
Customer plans to install (1) 75 kW cogen unit to be supplied by natural gas. Installation time frame dependent on the results of the network BETA test site.

[redacted]
Customer plans to install (1) 60 kW cogen unit to be supplied by natural gas. Installation time frame dependent on the results of the network BETA test site.

[redacted]
40 kW photovoltaic supplied by solar

[redacted]
35 kW Fuel Cell supplied by natural gas

[redacted]
80 kW synchronous generator, internal combustion, supplied by Natural Gas

[redacted]
30 kW photovoltaic supplied by solar

[redacted]
60 kW Induction generator, Internal Combustion, supplied by natural gas

[redacted]
60 kW Induction generator, Internal Combustion, supplied by natural gas

Cambridge Electric Light Company:
Cambridge Electric Company is aware of the following two (1) active customer proposal:

[redacted]
Customer is looking into the economics of installing a 200KW fuel cell, to be supplied by natural gas.

Commonwealth Electric Company:
Commonwealth Electric Company is aware of the following four (4) active customer proposals:

[redacted]
Currently in the design phase of (1) 250 kW Fuel Cell to be supplied by natural gas.

[redacted]
Customer plans to install a 1.4 KW photovoltaic array to be supplied by solar.

[redacted]
Customer is currently in the preliminary design phase of a 2mW co-generation unit to be supplied by natural gas.

[redacted]
4 kW photovoltaic supplied by solar

NSTAR Electric

Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 2002 through December 31, 2002

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Boston Edison Company											
		Cogen > 1 MW	Dual Fuel	1978	1978	Contract	5,000.0	2610	13,050,000	$ 182,309	$ 555,017
		Cogen > 1 MW	Diesel	N/A	N/A	Net	1,800.0	900	1,620,000	$ 22,631	$ 68,899
		Cogen > 1 MW	Dual Fuel	1972	1973	Net	10,000.0	7100	71,000,000	$ 991,870	$ 3,019,630
		Cogen > 1 MW	Jet Fuel	1992	1995	Net	52,000.0	500	26,000,000	$ 363,220	$ 1,105,780
		Cogen > 1 MW	Nat Gas	1994	1994	Net	2,400.0	8100	19,440,000	$ 271,577	$ 826,783
		Cogen 60kW-1 MW	Nat Gas	1984	1985	Net	600.0	8000	4,800,000	$ 67,056	$ 204,144
	›ital	Cogen 60kW-1 MW	#6 Fuel Oil	1987	1987	Net	225.0	7500	1,687,500	$ 23,574	$ 71,769
		Cogen 60kW-1 MW	Nat Gas	N/A	N/A	Net	75.0	4500	337,500	$ 4,715	$ 14,354
		Cogen 60kW-1 MW	Nat Gas	1986	1986	Net	105.0	5840	613,200	$ 8,566	$ 26,079
		Cogen 60kW-1 MW	Natural Gas	1982	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1982	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1985	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1986	1986	Contract	200.0	0	-	$ -	$ -
	h.	Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	600.0	3428	2,056,800	$ 28,733	$ 87,476
	h.	Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	60.0	4260	255,600	$ 3,571	$ 10,871
		Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	60.0	4000	240,000	$ 3,353	$ 10,207
	h.	Cogen 60kW-1 MW	Natural Gas	2001	2001	Net	75.0	3400	255,000	$ 3,562	$ 10,845
	h.	Cogen 60kW-1 MW	Natural Gas	2001	2001	Net	75.0	3400	255,000	$ 3,562	$ 10,845
	ts	Cogen 60kW-1 MW	Natural Gas	2001	2001	Net	75.0	7800	585,000	$ 8,172	$ 24,880
		Fuel Cell	Methane Gas	1997	1998	Net	200.0	7000	1,400,000	$ 19,558	$ 59,542
		Fuel Cell	Natural Gas	1995	1995	Net	200.0	8752	1,750,400	$ 24,453	$ 74,445
	Inc.	Hydroelectric	Run-of-river	N/A	1991	Contract	125.0	1313	164,125	$ 2,293	$ 6,980
	ig	Photovoltaic	Solar	2000	2000	Net	28.0	1250	35,000	$ 489	$ 1,489
		Photovoltaic	Solar	2001	2001	Net	0.5	1250	625	$ 9	$ 27
	Corr.	Steam turbine	Steam	2000	2000	Net	75.0	3000	225,000	$ 3,143	$ 9,569
		Photovoltaic	Solar	2002	2002	Net	3.3	1250	4,125	$ 58	$ 175
		Photovoltaic	Solar	2002	2002	Net	5.4	1250	6,750	$ 94	$ 287
		Photovoltaic	Solar	2002	2002	Net	2.0	1250	2,500	$ 35	$ 106
		Photovoltaic	Solar	2002	2002	Net	5.0	1250	6,250	$ 87	$ 266
		Photovoltaic	Solar	2002	2002	Net	20.0	1250	25,000	$ 349	$ 1,063
		Cogen 70kW	Nat Gas	2002	2002	None	70.0	4000	280,000	$ 3,912	$ 11,908
							74,309.2		146,095,375	$ 2,040,952	$ 6,213,436

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Cambridge Electric Light											
		Cogen > 1 MW	Nat Gas	06/01/1994	07/01/1995	Contract	21,500.0	6047	130,010,500	$ 1,878,652	$ 3,746,903
		Photovoltaic	Solar	11/15/1999	11/23/1999	Net	18.0	1250	22,500	$ 325	$ 648
Ray 366 Limited	100 Second Street, Cambridge, MA 02142	Photovoltaic	Solar	06/01/1998	06/30/1998	Net	6.0	1250	7,500	$ 108	$ 216
Total							21,524.0		130,040,500	$ 1,879,085	$ 3,747,767

NSTAR Electric

Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 2002 through December 31, 2002

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Commonwealth Electric											
C		Cogen < 60kW	Nat Gas	10/22/1997	10/30/1997	Net	5.0	0	-	$ -	$ -
I		Cogen < 60kW	#2 Fuel Oil	09/01/1996	12/12/1996	Net	5.0	1000	5,000	$ 151	$ 218
I		Cogen < 60kW	Propane	05/20/1998	06/15/1998	Net	5.0	486	2,430	$ 74	$ 106
E		Cogen < 60kW	#2 Fuel Oil	05/05/1995	05/13/1995	Net	5.0	1000	5,000	$ 151	$ 218
C	59	Cogen < 60kW	Nat Gas	11/01/1998	01/18/1998	Net	5.0	0	-	$ -	$ -
C		Cogen < 60kW	#2 Fuel Oil	07/30/1996	08/14/1996	Net	5.0	1000	5,000	$ 151	$ 218
.		Cogen < 60kW	#2 Fuel Oil	01/31/1997	02/07/1997	Net	5.0	0	-	$ -	$ -
H		Cogen < 60kW	Nat Gas	11/15/1997	12/01/1997	Net	5.0	252	1,260	$ 38	$ 55
M	71	Cogen < 60kW	#2 Fuel Oil	12/02/1996	12/20/1996	Net	5.0	0	-	$ -	$ -
F		Cogen < 60kW	#2 Fuel Oil	08/08/1995	08/11/1995	Net	5.0	1000	5,000	$ 151	$ 218
F		Cogen < 60kW	#2 Fuel Oil	03/28/1996	04/01/1996	Net	5.0	1000	5,000	$ 151	$ 218
F		Cogen < 60kW	#2 Fuel Oil	03/10/1992	03/16/1992	Net	5.0	0	-	$ -	$ -
S		Cogen < 60kW	#2 Fuel Oil	12/26/1995	01/05/1996	Net	5.0	1000	5,000	$ 151	$ 218
S		Cogen < 60kW	#2 Fuel Oil	11/16/1994	11/22/1994	Net	5.0	397	1,985	$ 60	$ 87
C		Cogen > 1 MW	Nat Gas	03/01/1993	07/05/1994	Contract	1,050.0	8712	9,147,600	$ 276,989	$ 399,018
S ls		Cogen 60kW-1 MW	Nat Gas	05/17/1991	07/17/1991	Contract	150.0	500	75,000	$ 2,271	$ 3,272
C ge		Fuel Cell	Natural Gas	1999	1999	Contract	200.0	8229	1,645,800	$ 49,835	$ 71,790
E		Photovoltaic	Solar	06/19/1996	08/19/1998	Net	2.0	1250	2,500	$ 76	$ 109
H		Photovoltaic	Solar	11/01/1998	12/15/1999	Net	2.0	1250	2,500	$ 76	$ 109
F		Photovoltaic	Solar	10/15/1998	11/01/1998	Net	2.0	1250	2,500	$ 76	$ 109
S		Photovoltaic	Solar	10/01/1997	11/15/1997	Net	2.0	1250	2,500	$ 76	$ 109
T		Photovoltaic	Solar	03/15/2000	03/15/2000	Net	1.0	1250	1,250	$ 38	$ 55
G		Photovoltaic	Solar	10/16/2001	10/16/2001	Net	0.2	1250	300	$ 9	$ 13
D		Water Turbine	Hydro	03/25/1983	04/04/1983	Net	15.0	1618	24,270	$ 735	$ 1,059
G		Water Turbine	Hydro	03/01/1983	03/01/1983	Net	7.0	0	-	$ -	$ -
V		Water Turbine	Hydro	N/A	12/01/1982	Contract	225.0	1300	292,500	$ 8,857	$ 12,759
R		Wind Mill	Wind	N/A	11/01/1983	Net	7.5	0	-	$ -	$ -
T	West Tanner	Cogen 60kW-1 MW	Nat Gas	2002	06/24/1905	Net	60.0	4000	240,000	$ 7,267	$ 10,469
Total							1,793.7		11,472,395	$ 347,384	$ 500,426

Notes
1. Estimated Annual Run Hours supplied by customer if available or best estimate.
2. Lost kWh estimated by taking the Design Capacity (kW) and multipling it by the Annual Run Hours supplied by the Customer.
3. Impact on Transition estimated by multiplying the lost kWh by the Average Transition Rate of the appropriate operating company.
4. Impact on Revenue estimated by multiplying the lost kWh by the Average Distribution and Transmission Rate of the appropriate operating company.

D.T.E. 03-121
Attachment DOER-1-1 (b)

NSTAR ELECTRIC GAS

NSTAR Electric & Gas Corporation
800 Boylston Street
Legal Department – 17th Flr.
Boston, MA 02199

William S. Stowe
Assistant General Counsel

Phone: 617-424-2544
Fax: 617-424-2733
E-mail: william_stowe@nstaronline.com

April 1, 2002

Hand Delivered

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2nd Flr.
Boston, MA 02110

Re: NSTAR Electric
Report of Activities of Qualifying Facilities
and On-Site Generating Facilities
January 1, 2001 through December 31, 2001

Dear Secretary Cottrell:

Pursuant to 220 CMR § 8.07, Boston Edison Company, Cambridge Electric Light Company and Commonwealth Electric Company hereby submit their Report of Activities of Qualifying Facilities and On-Site Generating Facilities for January 1, 2001 through December 31, 2001.

If there are any questions regarding any aspect of this report, please contact the undersigned.

Very truly yours,

William S Stowe

Enclosure

cc: Ron LeComte, Electric Power Division
Kevin Brannelly, Rates and Revenue Requirements Division
William H. Stevens, Hearing Officer D.T.E. 99-38

NSTAR ELECTRIC

Boston Edison Company
Cambridge Electric Light Company
Commonwealth Electric Company

Report of Activities of Qualifying Facilities and On-Site Generating Facilities January 1, 2001 through December 31, 2001

1. In compliance with 220 CMR 8.07, each Distribution Company, shall file with the Department of Telecommunications and Energy ("Department") a report of new Qualifying Facility and On-Site Generating Facility activity in a calendar year, by April of the subsequent year. Such filing shall include:

    a) The name and address of the owner, and the address where the Qualifying Facility or On-Site Generating Facility is located;

    b) A brief description of the type of Qualifying Facility or On-Site Generating Facility;

    c) The primary energy source used by the Qualifying Facility or On-Site Generating Facility;

    d) The date of installation and on-line date;

    e) The method of delivering power to the Distribution Company (contract or net metering);

    f) The design capacity of the Qualifying Facility or On-Site Generating Facility;

    g) A brief discussion identifying any Qualifying Facility or On-Site Generating Facility that was denied interconnection by the Distribution Company, including a statement of reasons for such denial.

Responses 1(a), (b), (c), (d), (e), (f):

Boston Edison Company activity during calendar year 2001:

b) Photovoltaic
c) Solar
d) Installed date: April 2001, On-Line date: May 14, 2001
e) Net Metering
f) 500 watts

b) Reciprocating gas fire engine
c) Gas
d) Installed date: June 2001, On-Line date: September 2001
e) Net Metering
f) (2) 75 kW units

b) Reciprocating gas fire engine
c) Gas
d) Installed date: July 2001, On-Line date: October 2001
e) Net Metering
f) (1) 75 kW unit

Cambridge Electric Light Company activity during calendar year 2001:
No new activity during 2001

Commonwealth Electric Company activity during calendar year 2001:

b) Photovoltaic
c) Solar
d) Installed date: February 2001, On-Line date: November 16, 2001
e) Net Metering
f) 240 watts

Response 1(g)
No Qualifying facility or On-Site Generating facility was denied interconnection by NSTAR

2. Each Distribution Company shall file with the Department a report describing the incremental reductions in the purchases of electricity during a calendar year due to customer operations of, or purchases from, On-Site Renewable Technologies; Fuel Cells; Cogeneration Equipment; On-site Generating Facilities eligible for net metering; or Cogeneration Facilities of 60 kW or less which are eligible for net metering. Such filing shall be submitted to the Department by April 1 of the subsequent year, and it shall include:

   a) A brief description of the incremental reductions in purchases of electricity during the calendar year due to customer operations of:

      1. On-Site Renewable Energy Technologies;

      2. Fuel Cells;

      3. Cogeneration equipment with a combined heat and power system efficiency of at least 50% base on the higher value of the fuel used in the system;

      4. On-Site Generation Facilities eligible for net metering; or

      5. Cogeneration Facilities of 60 kW or less which are eligible for net metering.

   b) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's transition charge, including a quantitative estimate of the lost dollar contribution to the Distribution Company's transition charge during the calendar year;

   c) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's kilowatt hour sales during the calendar year;

   d) An estimate of the percent of the Distribution Company's gross annual revenues that have been lost during the calendar year due to 220 CMR 8.07 (2)(a);

   e) A brief narrative identifying all customers that have given notice to the Distribution Company of their plans to reduce electricity purchases.

Responses 2(a), (b), (c), (d):
Please refer to Attachment A for a listing of customer facilities and estimated incremental reductions in purchases for Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company.

Response 2(e):

Boston Edison Company:

Boston Edison Company is aware of the following eleven (13) active customer proposals:

Currently installing (1) 75 kW cogeneration unit to be supplied by Natural Gas, to be used as a network BETA test site.

Currently evaluating the installation of 10 MW of cogeneration to be supplied by Natural Gas.

Currently on-hold pending ENRON bankruptcy resolution, with the installation of 1.5 MW of cogeneration to be supplied by Natural Gas.

Currently on-hold pending ENRON bankruptcy resolution, with the installation of 3.0 MW of cogeneration to be supplied by Natural Gas.

Currently on-hold pending ENRON bankruptcy resolution, with the installation of 4.5 MW of cogeneration to be supplied by Natural Gas.

2-200W Fuel Cells to be installed as a manufacturer's test site, to be supplied by Natural gas.

Customer plans to install (1) 60 kW cogen unit to be supplied by natural gas.

Customer plans to install (1) 75 kW cogen unit to be supplied by natural gas.

Customer plans to install (1) 60 kW cogen unit to be supplied by natural gas.

Customer plans to install (1) 75 kW cogen unit to be supplied by natural gas. Installation time frame dependent on the results of the network BETA test site.

Customer plans to install (1) 75 kW cogen unit to be supplied by natural gas. Installation time frame dependent on the results of the network BETA test site.

Customer plans to install (1) 60 kW cogen unit to be supplied by natural gas. Installation time frame dependent on the results of the network BETA test site.

Customer plans to install a 5 kW combination photovoltaic/wind system to be supplied by renewables.

Cambridge Electric Light Company:
Cambridge Electric Light Company is aware of the following active customer proposal:

Customer is looking into the economics of installing a 200KW fuel cell, to be supplied by natural gas.

Commonwealth Electric Company:
Commonwealth Electric Company is aware of the following four (4) active customer proposals:

Currently in the design phase of (1) 250 kW Fuel Cell to be supplied by natural gas.

Customer plans to install (2) 30KW Capstone Microturbines to be supplied by natural gas.

Customer plans to install a 1.4 KW photovoltaic array to be supplied by solar.

Customer is currently in the preliminary design phase of a 2mW co-generation unit to be supplied by natural gas.

NSTAR Electric

Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 2001 through December 31, 2001

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Boston Edison Company											
/		Cogen > 1 MW	Dual Fuel	1978	1978	Contract	5,000.0	2610	13,050,000	$ 182,309	$ 555,017
		Cogen > 1 MW	Diesel	N/A	N/A	Net	1,800.0	900	1,620,000	$ 22,631	$ 68,899
		Cogen > 1 MW	Dual Fuel	1972	1973	Net	10,000.0	7100	71,000,000	$ 991,870	$ 3,019,630
		Cogen > 1 MW	Jet Fuel	1992	1995	Net	52,000.0	500	26,000,000	$ 363,220	$ 1,105,780
		Cogen > 1 MW	Nat Gas	1994	1994	Net	2,400.0	8100	19,440,000	$ 271,577	$ 826,783
		Cogen 60kW-1 MW	Nat Gas	1984	1985	Net	600.0	8000	4,800,000	$ 67,056	$ 204,144
	›ital	Cogen 60kW-1 MW	#6 Fuel Oil	1987	1987	Net	225.0	7500	1,687,500	$ 23,574	$ 71,769
		Cogen 60kW-1 MW	Nat Gas	N/A	N/A	Net	75.0	4500	337,500	$ 4,715	$ 14,354
		Cogen 60kW-1 MW	Nat Gas	1986	1986	Net	105.0	5840	613,200	$ 8,566	$ 26,079
		Cogen 60kW-1 MW	Natural Gas	1982	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1982	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1985	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1986	1986	Contract	200.0	0	-	$ -	$ -
\	٦.	Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	600.0	3428	2,056,800	$ 28,733	$ 87,476
\	٦.	Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	60.0	4260	255,600	$ 3,571	$ 10,871
		Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	60.0	4000	240,000	$ 3,353	$ 10,207
\	٦.	Cogen 60kW-1 MW	Natural Gas	2001	2001	Net	75.0	3400	255,000	$ 3,562	$ 10,845
\	٦.	Cogen 60kW-1 MW	Natural Gas	2001	2001	Net	75.0	3400	255,000	$ 3,562	$ 10,845
F	s	Cogen 60kW-1 MW	Natural Gas	2001	2001	Net	75.0	7800	585,000	$ 8,172	$ 24,880
M		Fuel Cell	Methane Gas	1997	1998	Net	200.0	7000	1,400,000	$ 19,558	$ 59,542
M		Fuel Cell	Natural Gas	1995	1995	Net	200.0	8752	1,750,400	$ 24,453	$ 74,445
A	Inc.	Hydroelectric	Run-of-river	N/A	1991	Contract	125.0	1313	164,125	$ 2,293	$ 6,980
C	g	Photovoltaic	Solar	2000	2000	Net	28.0	1250	35,000	$ 489	$ 1,489
M		Photovoltaic	Solar	2001	2001	Net	0.5	1250	625	$ 9	$ 27
E	Corr.	Steam turbine	Steam	2000	2000	Net	75.0	3000	225,000	$ 3,143	$ 9,569
Total							74,203.5		145,770,750	$ 2,036,417	$ 6,199,630

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Cambridge Electric Light											
		Cogen > 1 MW	Nat Gas	06/01/1994	07/01/1995	Contract	21,500.0	6047	130,010,500	$ 1,878,652	$ 3,746,903
F		Photovoltaic	Solar	11/15/1999	11/23/1999	Net	18.0	1250	22,500	$ 325	$ 648
[redacted]		Photovoltaic	Solar	06/01/1998	06/30/1998	Net	6.0	1250	7,500	$ 108	$ 216
Total							21,524.0		130,040,500	$ 1,879,085	$ 3,747,767

NSTAR Electric

Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 2001 through December 31, 2001

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Commonwealth Electric											
		Cogen < 60kW	Nat Gas	10/22/1997	10/30/1997	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	#2 Fuel Oil	09/01/1996	12/12/1996	Net	5.0	1000	5,000	$ 151	$ 218
		Cogen < 60kW	Propane	05/20/1998	06/15/1998	Net	5.0	486	2,430	$ 74	$ 106
		Cogen < 60kW	#2 Fuel Oil	05/05/1995	05/13/1995	Net	5.0	1000	5,000	$ 151	$ 218
	59	Cogen < 60kW	Nat Gas	11/01/1998	01/18/1998	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	#2 Fuel Oil	07/30/1996	08/14/1996	Net	5.0	1000	5,000	$ 151	$ 218
		Cogen < 60kW	#2 Fuel Oil	01/31/1997	02/07/1997	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	Nat Gas	11/15/1997	12/01/1997	Net	5.0	252	1,260	$ 38	$ 55
	71	Cogen < 60kW	#2 Fuel Oil	12/02/1996	12/20/1996	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	#2 Fuel Oil	08/08/1995	08/11/1995	Net	5.0	1000	5,000	$ 151	$ 218
		Cogen < 60kW	#2 Fuel Oil	03/28/1996	04/01/1996	Net	5.0	1000	5,000	$ 151	$ 218
		Cogen < 60kW	#2 Fuel Oil	03/10/1992	03/16/1992	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	#2 Fuel Oil	12/26/1995	01/05/1996	Net	5.0	1000	5,000	$ 151	$ 218
		Cogen < 60kW	#2 Fuel Oil	11/16/1994	11/22/1994	Net	5.0	397	1,985	$ 60	$ 87
		Cogen > 1 MW	Nat Gas	03/01/1993	07/05/1994	Contract	1,050.0	8712	9,147,600	$ 276,989	$ 399,018
ıls		Cogen 60kW-1 MW	Nat Gas	05/17/1991	07/17/1991	Contract	150.0	500	75,000	$ 2,271	$ 3,272
ıge		Fuel Cell	Natural Gas	1999	1999	Contract	200.0	8229	1,645,800	$ 49,835	$ 71,790
		Photovoltaic	Solar	06/19/1996	08/19/1998	Net	2.0	1250	2,500	$ 76	$ 109
		Photovoltaic	Solar	11/01/1998	12/15/1999	Net	2.0	1250	2,500	$ 76	$ 109
		Photovoltaic	Solar	10/15/1998	11/01/1998	Net	2.0	1250	2,500	$ 76	$ 109
		Photovoltaic	Solar	10/01/1997	11/15/1997	Net	2.0	1250	2,500	$ 76	$ 109
		Photovoltaic	Solar	03/15/2000	03/15/2000	Net	1.0	1250	1,250	$ 38	$ 55
		Photovoltaic	Solar	10/16/2001	10/16/2001	Net	0.2	1250	300	$ 9	$ 13
		Water Turbine	Hydro	03/25/1983	04/04/1983	Net	15.0	1618	24,270	$ 735	$ 1,059
		Water Turbine	Hydro	03/01/1983	03/01/1983	Net	7.0	0	-	$ -	$ -
		Water Turbine	Hydro	N/A	12/01/1982	Contract	225.0	1300	292,500	$ 8,857	$ 12,759
		Wind Mill	Wind	N/A	11/01/1983	Net	7.5	0	-	$ -	$ -
Total							1,733.7		11,232,395	$ 340,117	$ 489,957

Notes
1. Estimated Annual Run Hours supplied by customer if available or best estimate.
2. Lost kWh estimated by taking the Design Capacity (kW) and multipling it by the Annual Run Hours supplied by the Customer.
3. Impact on Transition estimated by multiplying the lost kWh by the Average Transition Rate of the appropriate operating company.
4. Impact on Revenue estimated by multiplying the lost kWh by the Average Distribution and Transmission Rate of the appropriate operating company.

D.T.E. 03-121
Attachment DOER-1-1 (c)

NSTAR ELECTRIC GAS
NSTAR Services Company
Legal Department, Floor 17
800 Boylston Street Boston, Massachusetts 02199

William S. Stowe
Assistant General Counsel

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DC: W. Stowe
TKY

March 29, 2001

<u>Via Courier</u>

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, Floor 2
Boston, MA 02110

Re: NSTAR Electric
Report of Activities of Qualifying Facilities
and On-Site Generating Facilities
January 1, 2000 through December 31, 2000

Dear Secretary Cottrell:

Pursuant to 220 CMR § 8.07, Boston Edison Company, Cambridge Electric Light Company and Commonwealth Electric Company hereby submit their Report of Activities of Qualifying Facilities and On-Site Generating Facilities for January 1, 2000 through December 31, 2000.

If there are any questions regarding any aspect of this report, please contact the undersigned.

Very truly yours,

William S Stowe

Enclosure

cc: Ron LeComte, Electric Power Division
Keven Brannelly, Rates and Revenue Requirements Division
William H. Stevens, Hearing Officer D.T.E. 99-38

NSTAR ELECTRIC

Boston Edison Company
Cambridge Electric Light Company
Commonwealth Electric Company

Report of Activities of Qualifying Facilities and On-Site Generating Facilities January 1, 2000 through December 31, 2000

1. In compliance with 220 CMR 8.07, each Distribution Company, shall file with the Department of Telecommunications and Energy ("Department") a report of new Qualifying Facility and On-Site Generating Facility activity in a calendar year, by April of the subsequent year. Such filing shall include:

    a) The name and address of the owner, and the address where the Qualifying Facility or On-Site Generating Facility is located;

    b) A brief description of the type of Qualifying Facility or On-Site Generating Facility;

    c) The primary energy source used by the Qualifying Facility or On-Site Generating Facility;

    d) The date of installation and on-line date;

    e) The method of delivering power to the Distribution Company (contract or net metering);

    f) The design capacity of the Qualifying Facility or On-Site Generating Facility;

    g) A brief discussion identifying any Qualifying Facility or On-Site Generating Facility that was denied interconnection by the Distribution Company, including a statement of reasons for such denial.

Responses 1(a), (b), (c), (d), (e), (f):

Boston Edison Company activity during calendar year 2000:

b) Photovoltaic
c) Solar
d) Installed date: January 2000, On-Line date: February 29, 2000
e) Net Metering
f) 28 kW

b) Back-pressure Steam Turbine
c) District steam
d) Installed date: September 1999, On-Line date: January 2000
e) Net Metering
f) 75 kW

Cambridge Electric Light Company activity during calendar year 2000:
No new activity during 2000

Commonwealth Electric Company activity during calendar year 2000:

b) Photovoltaic
c) Solar
d) Installed date: February 2000, On-Line date: March 15, 2000
e) Net Metering
f) 1 kW

Response 1(g)

No Qualifying facility or On-Site Generating facility was denied interconnection by NSTAR.

2. Each Distribution Company shall file with the Department a report describing the incremental reductions in the purchases of electricity during a calendar year due to customer operations of, or purchases from, On-Site Renewable Technologies; Fuel Cells; Cogeneration Equipment; On-site Generating Facilities eligible for net metering; or Cogeneration Facilities of 60 kW or less which are eligible for net metering. Such filing shall be submitted to the Department by April 1 of the subsequent year, and it shall include:

   a) A brief description of the incremental reductions in purchases of electricity during the calendar year due to customer operations of:

      1. On-Site Renewable Energy Technologies;

      2. Fuel Cells;

      3. Cogeneration equipment with a combined heat and power system efficiency of at least 50% base on the higher value of the fuel used in the system;

      4. On-Site Generation Facilities eligible for net metering; or

      5. Cogeneration Facilities of 60 kW or less which are eligible for net metering.

   b) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's transition charge, including a quantitative estimate of the lost dollar contribution to the Distribution Company's transition charge during the calendar year;

   c) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's kilowatt hour sales during the calendar year~

   d) An estimate of the percent of the Distribution Company's gross annual revenues that have been lost during the calendar year due to 220 CMR 8.07 (2)(a);

   e) A brief narrative identifying all customers that have given notice to the Distribution Company of their plans to reduce electricity purchases

Responses 2(a), (b), (c), (d):

Please refer to Attachment A for a listing of customer facilities and estimated incremental reductions in purchases for Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company.

Response 2(e):

Boston Edison Company:

Boston Edison Company is aware of the following six (6) active customer proposals:

Currently bidding the installation of 75 kW cogeneration unit to be supplied by Natural Gas.

Currently evaluating the installation of 10 MW of cogeneration to be supplied by Natural Gas.

Currently proceeding with the installation of 1.5 MW of cogeneration to be supplied by Natural Gas.

Currently proceeding with the installation of 3.0 MW of cogeneration to be supplied by Natural Gas.

Currently proceeding with the installation of 4.5 MW of cogeneration to be supplied by Natural Gas.

Currently evaluating the installation of four 75 kW microturbine units to be supplied by Natural Gas.

Cambridge Electric Light Company:
No new activity

Commonwealth Electric Company:
Commonwealth Electric Company is aware of the following two (2) active customer proposals:

Currently evaluating the installation of 1.89 MW of cogeneration to be supplied by Natural Gas.

Currently evaluating the installation of 660 kW of cogeneration to be supplied by Natural Gas.

NSTAR Electric

Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 2000 through December 31, 2000

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Boston Edison Company											
		Cogen > 1 MW	Dual Fuel	1978	1978	Contract	5,000.0	2610	13,050,000	$ 246,776	$ 417,470
		Cogen > 1 MW	Diesel	N/A	N/A	Net	1,800.0	900	1,620,000	$ 30,634	$ 51,824
		Cogen > 1 MW	Dual Fuel	1972	1973	Net	10,000.0	7100	71,000,000	$ 1,342,610	$ 2,271,290
		Cogen > 1 MW	Jet Fuel	1992	1995	Net	52,000.0	500	26,000,000	$ 491,660	$ 831,740
		Cogen > 1 MW	Nat Gas	1994	1994	Net	2,400.0	8100	19,440,000	$ 367,610	$ 621,886
	pital	Cogen 60kW-1 MW	Nat Gas	1984	1985	Net	600.0	8000	4,800,000	$ 90,768	$ 153,552
		Cogen 60kW-1 MW	#6 Fuel Oil	1987	1987	Net	225.0	7500	1,687,500	$ 31,911	$ 53,983
		Cogen 60kW-1 MW	Nat Gas	N/A	N/A	Net	75.0	4500	337,500	$ 6,382	$ 10,797
		Cogen 60kW-1 MW	Nat Gas	1986	1986	Net	105.0	5840	613,200	$ 11,596	$ 19,616
		Cogen 60kW-1 MW	Natural Gas	1982	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1982	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1985	1986	Net	75.0	0	-	$ -	$ -
		Cogen 60kW-1 MW	Natural Gas	1986	1986	Contract	200.0	0	-	$ -	$ -
	:h.	Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	600.0	3428	2,056,800	$ 38,894	$ 65,797
	:h.	Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	60.0	4260	255,600	$ 4,833	$ 8,177
		Cogen 60kW-1 MW	Natural Gas	1989	1989	Contract	60.0	4000	240,000	$ 4,538	$ 7,678
		Fuel Cell	Methane Gas	1997	1998	Net	200.0	7000	1,400,000	$ 26,474	$ 44,786
		Fuel Cell	Natural Gas	1995	1995	Net	200.0	8752	1,750,400	$ 33,100	$ 55,995
	, Inc.	Hydroelectric	Run-of-river	N/A	1991	Contract	125.0	1313	164,125	$ 3,104	$ 5,250
	dg	Photovoltaic	Solar	2000	2000	Net	28.0	1250	35,000	$ 662	$ 1,120
	Corr.	Steam turbine	Steam	2000	2000	Net	75.0	3000	225,000	$ 4,255	$ 7,198
Total							73,978.0		144,675,125	$ 2,735,807	$ 4,628,157

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Cambridge Electric Light											
		Cogen > 1 MW	Nat Gas	06/01/1994	07/01/1995	Contract	21,500.0	6047	130,010,500	$ 382,231	$ 2,614,511
R		Photovoltaic	Solar	11/15/1999	11/23/1999	Net	18.0	1250	22,500	$ 66	$ 452
		Photovoltaic	Solar	06/01/1998	06/30/1998	Net	6.0	1250	7,500	$ 22	$ 151
Total							21,524.0		130,040,500	$ 382,319	$ 2,615,114

NSTAR Electric

Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 2000 through December 31, 2000

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)	Estimated Annual Run Hrs (1)	Estimated Lost kWh (2)	Estimated Impact On Transition (3)	Estimated Impact On T&D Rev. (4)
Commonwealth Electric											
		Cogen < 60kW	Nat Gas	10/22/1997	10/30/1997	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	#2 Fuel Oil	09/01/1996	12/12/1996	Net	5.0	1000	5,000	$ 143	$ 205
		Cogen < 60kW	Propane	05/20/1998	06/15/1998	Net	5.0	486	2,430	$ 69	$ 100
		Cogen < 60kW	#2 Fuel Oil	05/05/1995	05/13/1995	Net	5.0	1000	5,000	$ 143	$ 205
	i59	Cogen < 60kW	Nat Gas	11/01/1998	01/18/1998	Net	5.0	0	-	$ -	$ -
	5	Cogen < 60kW	#2 Fuel Oil	07/30/1996	08/14/1996	Net	5.0	1000	5,000	$ 143	$ 205
		Cogen < 60kW	#2 Fuel Oil	01/31/1997	02/07/1997	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	Nat Gas	11/15/1997	12/01/1997	Net	5.0	252	1,260	$ 36	$ 52
	;71	Cogen < 60kW	#2 Fuel Oil	12/02/1996	12/20/1996	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	#2 Fuel Oil	08/08/1995	08/11/1995	Net	5.0	1000	5,000	$ 143	$ 205
	7	Cogen < 60kW	#2 Fuel Oil	03/28/1996	04/01/1996	Net	5.0	1000	5,000	$ 143	$ 205
		Cogen < 60kW	#2 Fuel Oil	03/10/1992	03/16/1992	Net	5.0	0	-	$ -	$ -
		Cogen < 60kW	#2 Fuel Oil	12/26/1995	01/05/1996	Net	5.0	1000	5,000	$ 143	$ 205
		Cogen < 60kW	#2 Fuel Oil	11/16/1994	11/22/1994	Net	5.0	397	1,985	$ 57	$ 81
		Cogen > 1 MW	Nat Gas	03/01/1993	07/05/1994	Contract	1,050.0	8712	9,147,600	$ 261,255	$ 375,326
		Cogen 60kW-1 MW	Nat Gas	05/17/1991	07/17/1991	Contract	150.0	500	75,000	$ 2,142	$ 3,077
		Fuel Cell	Natural Gas	1999	1999	Contract	200.0	8229	1,645,800	$ 47,004	$ 67,527
		Photovoltaic	Solar	06/19/1996	08/19/1998	Net	2.0	1250	2,500	$ 71	$ 103
		Photovoltaic	Solar	11/01/1998	12/15/1999	Net	2.0	1250	2,500	$ 71	$ 103
		Photovoltaic	Solar	10/15/1998	11/01/1998	Net	2.0	1250	2,500	$ 71	$ 103
		Photovoltaic	Solar	10/01/1997	11/15/1997	Net	2.0	1250	2,500	$ 71	$ 103
		Photovoltaic	Solar	03/15/2000	03/15/2000	Net	1.0	1250	1,250	$ 36	$ 51
		Water Turbine	Hydro	03/25/1983	04/04/1983	Net	15.0	1618	24,270	$ 693	$ 996
		Water Turbine	Hydro	03/01/1983	03/01/1983	Net	7.0	0	-	$ -	$ -
		Water Turbine	Hydro	N/A	12/01/1982	Contract	225.0	1300	292,500	$ 8,354	$ 12,001
		Wind Mill	Wind	N/A	11/01/1983	Net	7.5	0	-	$ -	$ -
Total							1,733.5		11,232,095	$ 320,789	$ 460,853

Notes
1. Estimated Annual Run Hours supplied by customer if available or best estimate.
2. Lost kWh estimated by taking the Design Capacity (kW) and multipling it by the Annual Run Hours supplied by the Customer.
3. Impact on Transition estimated by multiplying the lost kWh by the Average Transition Rate of the appropriate operating company.
4. Impact on Revenue estimated by multiplying the lost kWh by the Average Distribution and Transmission Rate of the appropriate operating company.

D.T.E. 03-121
Attachment DOER-1-1 (d)

NSTAR SERVICES CO.

800 Boylston Street
Boston, Massachusetts 02199

The NSTAR Companies
Boston Edison
ComElectric
ComGas
Cambridge Electric

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Assistant General Counsel

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March 31, 2000

Hand Delivered

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2nd Flr.
Boston, MA 02110

Re: Boston Edison Company, Cambridge Electric Light Company and Commonwealth Electric Company
1999 Report of Activities of Qualifying Facilities and On-Site Generating Facilities

Dear Secretary Cottrell:

Pursuant to 220 CMR § 8.07, Boston Edison Company, Cambridge Electric Light Company and Commonwealth Electric Company hereby submit their Report of Activities of Qualifying Facilities and On-Site Generating Facilities for 1999.

If there are any questions regarding any aspect of this report, please contact the undersigned.

Very truly yours,

William S Stowe

Enclosure

cc: Ron LeComte, Electric Power Division
Keven Brannelly, Rates and Revenue Requirements Division
William H. Stevens, Hearing Officer D.T.E. 99-38
George Dean, Esq.

BOSTON EDISON COMPANY
CAMBRIDGE ELECTRIC LIGHT COMPANY
COMMONWEALTH ELECTRIC COMPANY

Report of Activities of Qualifying Facilities and On-Site Generating Facilities
January 1, 1999 through December 31, 1999

1. In compliance with 220 CMR 8.07, each Distribution Company, shall file with the Department of Telecommunications and Energy ("Department") a report of new Qualifying Facility and On-Site Generating Facility activity in a calendar year, by April 1 of the subsequent year. Such filing shall include:

   a) The name and address of the owner, and the address where the Qualifying Facility or On-Site Generating Facility is located;

   b) A brief description of the type of Qualifying Facility or On-Site Generating Facility;

   c) The primary energy source used by the Qualifying Facility or On-Site Generating Facility;

   d) The date of installation and on-line date;

   e) The method of delivering power to the Distribution Company (contract or net metering);

   f) The design capacity of the Qualifying Facility or On-Site Generating Facility;

   g) A brief discussion identifying any Qualifying Facility or On-Site Generating Facility that was denied interconnection by the Distribution Company, including a statement of reasons for such denial.

Response:

For Boston Edison Company and Commonwealth Electric Company there was no new activity during 1999. For Cambridge Electric Light Company there was the following activity:

18 kW Solar Photovoltaic
Installed: 11/15/99
Online: 11/23/99
Net metering

No Qualifying Facility or On-Site Generating Facility was denied interconnection by Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company.

2) Each Distribution Company shall file with the Department a report describing the incremental reductions in the purchases of electricity during a calendar year due to customer operations of, or purchases from, On-Site Renewable Technologies; Fuel Cells; Cogeneration Equipment; On-site Generating Facilities eligible for net metering; or Cogeneration Facilities of 60 kW or less which are eligible for net metering. Such filing shall be submitted to the Department by April 1 of the subsequent year, and it shall include:

a) A brief description of the incremental reductions in purchases of electricity during the calendar year due to customer operations of:

1. On-Site Renewable Energy Technologies;

2. Fuel Cells;

3. Cogeneration equipment with a combined heat and power system efficiency of at least 50% base on the higher value of the fuel used in the system;

4. On-Site Generation Facilities eligible for net metering; or

5. Cogeneration Facilities of 60 kW or less which are eligible for net metering.

b) A brief narrative identifying all customers that have given notice to the Distribution Company of their plans to reduce electricity purchases.

c) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's transition charge, including a quantitative estimate of the lost dollar contribution to the Distribution Company's transition charge during the calendar year;

d) A brief discussion of the effect of 220 CMR 8.07 (2)(a) on the Distribution Company's kilowatt hour sales during the calendar year;

e) An estimate of the percent of the Distribution Company's gross annual revenues that have been lost during the calendar year due to 220 CMR 8.07 (2)(a);

Response (a):

Please refer to Attachment A for a listing of customer facilities for Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company.

Response (b), (c), and (d):

For each of Boston Edison Company, Cambridge Electric Light Company, to the extent that there have been small customer installations of the technologies listed in Paragraph 2(a), these customers in aggregate are small and a determination of the level of lost kilowatthour sales, transition cost, and gross annual revenues has not been performed, but is believed to be relatively insignificant for this reporting period.

In addition, for Cambridge Electric Light Company, please refer to the discussion of the Effect on Transition Charges in its June 23, 1999 letter reporting on activities of Qualifying Facilities and On-Site Generating Facilities for the period March 1, 1998 through February 28, 1999.

Response (e):

Boston Edison Company is aware of the following three proposed customer facilities:

finalizing the installation of a 28 kW photovoltaic system to be supplied by Solar.

bidding the installation of 2-75 kW cogeneration units to be supplied by Natural Gas.

installation of 1-75 kW backpressure steam reduction station to be supplied by district steam.

In addition, please refer to Boston Edison Company's letter of June 25, 1999 reporting on activities of Qualifying Facilities and On-Site Generating Facilities for the period March 1, 1998 through February 28, 1999 regarding additional proposed projects that, in certain cases, may remain under consideration by the customer.

Cambridge Electric Light Company and Commonwealth Electric Company have not received notice of additional customer plans to reduce electricity purchases due to operations of, or purchases from a facility described in 220 CMR 8.07(2)(a).

Boston Edison Company
Cambridge Electric Light Company
Commonwealth Electric Light Company
Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 1999 through December 31,1999

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)
Boston Edison Company							
		Cogeneration	Dual Fuel	1972	1973	Net	10,000.0
		Cogeneration	Nat Gas	N/A	N/A	Net	75.0
		Cogeneration	Dual Fuel	1978	1978	Net	5,000.0
		Cogeneration	Jet Fuel	1992	1995	Net	52,000.0
		Fuel Cell	Methane Gas	1997	1998	Net	200.0
		Cogeneration	Nat Gas	1989	1989	Net	600.0
		Cogeneration	#6 Fuel Oil	1987	1987	Net	225.0
		Cogeneration	Diesel	N/A	N/A	Net	1,800.0
		Cogeneration	Nat Gas	1984	1985	Net	600.0
		Cogeneration	Nat Gas	1994	1994	Net	2,400.0
		Hydroelectric	Run-of-river		1991	Net	125
		Cogeneration	Natural Gas	1982	1986	Net	75
		Cogeneration	Natural Gas	1982	1986	Net	75
		Cogeneration	Natural Gas	1985	1986	Net	75
		Cogeneration	Natural Gas	1986	1986	Net	200
		Cogeneration	Natural Gas	1989	1989	Net	595
		Cogeneration	Nat Gas	1986	1986	Net	105.0
SubTotal							74,150.0
Cambridge Electric Light							
		Photovoltaic	Solar	11/15/1999	11/23/1999	Net	18.0
		Photovoltaic	Solar	06/01/1998	06/30/1998	Net	6.0
		Cogenerator	Nat Gas	06/01/1994	07/01/1995	Contract	20,500.0
SubTotal							20,524.0

Boston Edison Company
Cambridge Electric Light Company
Commonwealth Electric Light Company
Activities of Qualifying Facilities and On-Site Generating Facilities
Reporting Period: January 1, 1999 through December 31,1999

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Cap. (kW)
Commonwealth Electric							
		Water Turbine	Hydro	03/01/1983	03/01/1983	Net	7.0
		Photovoltaic	Solar	06/19/1996	08/19/1998	Net	2.0
		Cogenerator	#2 Fuel Oil	07/30/1996	08/14/1996	Net	5.0
		Cogenerator	#2 Fuel Oil	05/05/1995	05/13/1995	Net	5.0
		Water Turbine	Hydro	03/25/1983	04/04/1983	Net	15.0
		Cogenerator	#2 Fuel Oil	03/28/1996	04/01/1996	Net	5.0
		Cogenerator	#2 Fuel Oil	12/02/1996	12/20/1996	Net	5.0
		Cogenerator	#2 Fuel Oil	08/08/1995	08/11/1995	Net	5.0
		Cogenerator	#2 Fuel Oil	01/31/1997	02/07/1997	Net	5.0
		Cogenerator	Nat Gas	10/22/1997	10/30/1997	Net	5.0
		Cogenerator	Nat Gas	03/01/1993	07/05/1994	Net	1,050.0
		Wind Mill	Wind	N/A	11/01/1983	Net	7.5
		Photovoltaic	Solar	10/01/1997	11/15/1997	Net	2.0
		Cogenerator	#2 Fuel Oil	03/10/1992	03/16/1992	Net	5.0
		Cogenerator	Nat Gas	11/01/1998	01/18/1998	Net	5.0
		Cogenerator	#2 Fuel Oil	12/26/1995	01/05/1996	Net	5.0
		Cogenerator	#2 Fuel Oil	09/01/1996	12/12/1996	Net	5.0
		Cogenerator	#2 Fuel Oil	11/16/1994	11/22/1994	Net	5.0
		Cogenerator	Nat Gas	05/17/1991	07/17/1991	Net	150.0
		Photovoltaic	Solar	10/15/1998	11/01/1998	Net	2.0
		Cogenerator	Nat Gas	11/15/1997	12/01/1997	Net	5.0
		Cogenerator	Propane	05/20/1998	06/15/1998	Net	5.0
		Photovoltaic	Solar	11/01/1998	12/15/1999	Net	2.0
		Water Turbine	Hydro	N/A	12/01/1982	Net	225.0
Subtotal							1,532.5
Total							96,206.5

D.T.E. 03-121
Attachment DOER-1-1 (e)

cc [illegible]
W Dowlin
J Capr-Hanson

Boston Edison
A BEC ENERGY COMPANY

Catherine J. Keuthen
Assistant General Counsel

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Fax: 617-424-2733
E-mail: catherine_keuthen@bedison.com

June 25,1999

Hand Delivered

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
100 Cambridge Street - 12th Flr.
Boston, MA 02202

Re: Boston Edison Company

Dear Secretary Cottrell:

The following is in response to the Department's June 16, 1999 request regarding Boston Edison's Qualifying Facility and On-Site Generating Facility activity.

(1) A report of Qualifying Facility and On-Site Generating Facility activity between March 1, 1998 and March 1, 1999.

(1) There have been no new installations by the Company's top 800 customers (based on revenues), of Qualifying Facilities or On-Site Generating Facilities in the Company's service territory between March 1, 1998 and March 1, 1999.

(2) A brief discussion identifying any QF or On-Site Generating Facility that was denied interconnection by the Distribution Company during the same time period as above, including a statement of reasons for such denial.

(2) No Qualifying Facilities or On-Site Generating Facilities have been denied interconnection by Boston Edison Company between March 1, 1998 and March 1, 1999

(3) A brief discussion identifying all formally announced and presently pending plans of customers to install equipment that would be categorized as a Qualifying Facility or On-Site generating facility.

(3) The Company is aware of the following proposed projects and has provided the information requested in question 1 for each of the projects.

b) 8 MW Cogeneration Plant
c) Gas Fired
d) Customer is currently evaluating proposal and the plant is not yet on line.
e) N/A
f) 8 Megawatts

b) 8+ MW Cogeneration Plant
c) Gas Fired
d) Customer is currently evaluating proposal and the plant is not yet on line.
e) N/A
f) 8+ Megawatts

b) 5 MW Cogeneration Plant
c) Gas Fired
d) Customer is currently evaluating proposal and the plant is not yet on line.
e) N/A
f) 5 Megawatts

b) 3 MW Cogeneration Plant
c) Gas Fired
d) Customer is currently evaluating proposal and the plant is not yet on line.
e) N/A
f) 3 Megawatts

b) 75 kW On Site Generator (Tecogen Unit)
c) Gas Fired
d) Customer is currently evaluating proposal and the plant is not yet on line.
e) N/A
f) 75 kW

b) 75 kW On Site Generator (Micro Turbine Unit)
c) Gas Fired
d) Customer is currently evaluating proposal and the plant is not yet on line.
e) N/A
f) 75 kW

(4) A brief discussion of the effect of the increased use of these technologies on the transition charges of the Company. Please indicate in your response an estimation of the portion of these technologies represent as a percentage of the Company's annual gross revenues.

(4) The increased use of these technologies would result in lower kWh delivered. For example, the current potential loss per kW for an estimated load factor of 50% at our current Access Charge level or 2.76 cents/kWh is $121 per kW per year.

Please do not hesitate to call me should you have any questions.

Sincerely,

Catherine Kentner

cc: Thomas Bessette, Director, Electric Power Division
Gerry Bingham, Analyst, Electric Power Division

COMElectric

Cambridge Electric Light Company
Commonwealth Electric Company
One Main Street
Post Office Box 9150
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Telephone (617) 225-4000

JOHN COPE-FLANAGAN, ESQ.
Direct Dial: (617) 225-4778
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cope-flanaganj@comenergy.com

June 23, 1999

Mary Cottrell, Secretary
Department of Telecommunications and Energy
100 Cambridge Street, Room 1210
Boston, Massachusetts 02202

Re: Report of Activities of Qualifying Facilities and On-Site Generating Facilities
March 1, 1998 through February 28, 1999

Dear Secretary Cottrell:

In compliance with the letter of the Department of Telecommunications and Energy ("Department") dated June 16, 1999, Cambridge Electric Light Company and Commonwealth Electric Company (the "Companies") hereby file three (3) copies of their report on the activities of Qualifying Facilities and On-Site Generating Facilities for the period March 1, 1998 through February 28, 1999.

The Companies would be pleased to provide such additional information as the Department may require. If you have any questions regarding this report, please contact me.

Sincerely,

John Cope-Flanagan

John Cope-Flanagan
Regulatory Attorney

enclosure

cc: Thomas Bessette, Director, Electric Power Division
Gerry Bingham, Analyst, Electric Power Division

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CAMBRIDGE ELECTRIC LIGHT COMPANY
AND
COMMONWEALTH ELECTRIC COMPANY

REPORT ON ACTIVITIES OF
QUALIFYING FACILITIES AND ON-SITE GENERATING FACILITIES

MARCH 1, 1998 THROUGH FEBRUARY 28, 1999

Cambridge Electric Light Company
Commonwealth Electric Company

Report on Activities of
Qualifying Facilities and On-Site Generating Facilities
March 1, 1998 through February 28, 1999

Introduction

In compliance with the letter of the Department of Telecommunications and Energy ("Department") dated June 16, 1999, this report provides information on the activities of "Qualifying Facilities" and "On-Site Generating Facilities" located within the respective service territories of Cambridge Electric Light Company ("Cambridge") and Commonwealth Electric Company ("Commonwealth"). This report covers the period March 1, 1998 through February 28, 1999. As stated by the Department, for purposes of this report, the term Qualifying Facility shall have the same meaning as the term is defined in the Public Utility Regulatory Policies Act of 1978, and the term On-Site Generating Facility shall mean "any plant or equipment that is used to produce, manufacture, or otherwise generate electricity, that is not a transmission facility, and that has a design capacity of 60 kilowatts or less."

This report contains the following information:

(1) The following identifying information on Qualifying Facilities and On-Site Generating Facilities (together "Facility" or "Facilities"):

   (a) The name and address of the owner, and the address where the Facility is located;

   (b) A brief description of the type of Facility;

(c) The primary energy source used by the Facility;

(d) The date of installation and on-line date;

(e) The method of delivering power to the Distribution Company (contract or net metering); and

(f) The design capacity of the Facility.

(2) A brief discussion identifying any Qualifying Facility or On-Site Generating Facility that was denied interconnection by the Distribution Company during the time period as above, including a statement of the reasons for such denial.

(3) A brief discussion identifying all formally announced and presently pending plans of customers to install equipment that would be categorized as a Qualifying Facility or On-Site Generating Facility.

(4) A brief discussion of the effect of the increased use of these technologies on the transition charges of the Company. Please include in your response an estimation of the portion these technologies represent as a percent of the Company's annual gross revenue.

(1) Identifying Information

Information for Section (1) is contained in Attachment A to this report.

(2) Denial of Interconnection

No Qualifying Facility or On-Site Generating Facility was denied interconnection to the system of Cambridge or Commonwealth during the period of this report.

(3) Pending Plans

The installation of a photovoltaic system with a design capacity of 18 kilowatts is currently pending at the Porter Square Mall in Cambridge, Massachusetts.

(4) Effect on Transition Charges

For Cambridge, the departure of Massachusetts Institute of Technology ("MIT") as a full-requirements customer has imposed significant stranded costs on its remaining customer base. MIT has historically been Cambridge's largest or second largest customer, representing nearly 10 percent or electricity sales on Cambridge's system and about 8 percent of total revenues. In September 1995, MIT began self-generating a majority of its electricity requirements through the installation of an approximately 20 megawatt ("MW") generator. Based on the operation of MIT's 20 MW unit, MIT now purchases less than 10 percent of its electricity requirements from Cambridge. Consequently, a considerable level of fixed, unavoidable long-term obligations, which Cambridge prudently incurred over the years to serve MIT reliably and efficiently, currently exits that are included in Cambridge's transition charges paid by other customers. As this situation originally developed, Cambridge sought approval by the Department of a Customer Transition Charge ("CTC") to avoid the cost shifting to customers that would otherwise be caused by MIT's sudden departure. In its Order, the Department approved a CTC for application to MIT of approximately $1.3 million annually. Cambridge Electric Light Company, D.P.U. 95-36/94-101 (1995). MIT appealed the Department's Order to the Supreme Judicial Court (the "Court"). The Court's order approved the CTC and the recovery of stranded

costs as being in the public interest, but remanded the Order to the Department for additional findings in support of its overall conclusions. Massachusetts Institute of Technology v. Department of Public Utilities, 425 Mass. 856 (1997). The case on remand is presently before the Department.

In parallel with these events and the restructuring of the electric industry, Cambridge and Commonwealth proposed to establish an exit charge, pursuant to section 1G(g) of the Electric Restructuring Act of 1997 (the "Act"). See G.L. c. 164, § 1G(g). Under the exit charge proposed by Cambridge and Commonwealth, MIT and other large customers pursuing self-generation would be required to pay a charge equal to the kilowatt-hours that would have otherwise been purchased from Cambridge or Commonwealth times the annual transition charge then in effect. The intent of the exit charge, as set forth in the Act, was to avoid the significant and adverse rate impacts on remaining customers that would occur were a large customer permitted to bypass paying transition charges for which it is responsible. The exit charge proposed by Cambridge, if approved by the Department, would have resulted in MIT contributing approximately $2.3 million in the first year of its application based on the size of MIT's load and the transition charge then in effect. However, in August 1998, the Department rejected Cambridge's and Commonwealth's exit charges.

Concurrently, in pursuing the remand ordered by the Court, Cambridge was requested by the Department to update its CTC calculation using actual data for estimates, where available, and updated estimates, if applicable. On October 8, 1998, Cambridge submitted for the Department's review a set of revised CTC calculations based on such updated data and four alternative

approaches to performing the CTC calculation. As indicated in the October 8th response, the CTC charge for which MIT would be responsible ranges from $4.8 million to $6.3 million under the scenarios analyzed.[1] To date the Department has not ruled on the issues remanded by the Court pertaining to the CTC.

Other than in the case of MIT for Cambridge, neither Cambridge nor Commonwealth has any large-scale self-generation on their systems. To the extent that small on-site generation exists of 60 kilowatts or less for both Cambridge and Commonwealth, as described above, these customers in aggregate are small and a determination of the level of transition cost shifting or gross revenue loss represented by these customers has not been performed, but is believed to be relatively insignificant for the report period.

Dated: June 23, 1999

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1 These amounts correspond to the period during which MIT's self-generating unit commenced operation in September 1995, through February 28, 1998, when the CTC terminated pursuant to its terms. When the $3.1 million that MIT effectively paid as CTC amounts is reflected in the calculations, MIT would have an additional CTC responsibility ranging from $1.7 million to $3.1 million under the four respective scenarios.

Cambridge Electric Light Company
Commonwealth Electric Company
Activities of Qualifying Facilities and On-Site Generating Facilities
March 1, 1998 through February 28, 1999

Customer	Service Address	Facility Type	Energy Source	Installation Date	Online Date	Delivery Method	Design Capacity
Cambridge							
		Photovoltaic	Solar Energy	6/1/98	6/30/98	Net	6 Kw
		Cogenerator	Natural Gas	6/1/94	7/1/95	Contract	20.5 Mw
Commonwealth							
		Water Turbine	Hydro Power	3/1/83	3/1/83	Net	7 Kw
		Photovoltaic	Solar Energy	6/19/98	8/19/98	Net	2 Kw
		Cogenerator	#2 Fuel Oil	7/30/96	8/14/96	Net	5 Kw
		Cogenerator	#2 Fuel Oil	5/5/95	5/13/95	Net	5 Kw
		Water Turbine	Hydro Power	3/25/83	4/4/83	Net	15 Kw
		Cogenerator	#2 Fuel Oil	3/28/96	4/1/96	Net	5 Kw
		Cogenerator	#2 Fuel Oil	12/2/96	12/20/96	Net	5 Kw
		Cogenerator	#2 Fuel Oil	8/8/95	8/11/95	Net	5 Kw
		Cogenerator	#2 Fuel Oil	1/31/97	2/7/97	Net	5 Kw
		Cogenerator	Natural Gas	10/22/97	10/30/97	Net	5 Kw
		Cogenerator	Natural Gas	3/1/93	7/5/94	Net	1050 Kw
		Wind Mill	Wind	NA	11/1/83	Net	7.5 Kw
		Photovoltaic	Solar Energy	10/1/97	11/15/97	Net	2Kw
		Cogenerator	#2 Fuel Oil	3/10/92	3/16/92	Net	5 Kw
		Cogenerator	Natural Gas	11/1/98	1/18/98	Net	5 Kw
		Cogenerator	#2 Fuel Oil	12/26/95	1/5/96	Net	5 Kw
		Cogenerator	#2 Fuel Oil	9/1/96	12/12/96	Net	5 Kw
		Cogenerator	#2 Fuel Oil	11/16/94	11/22/94	Net	5 Kw
		Cogenerator	Natural Gas	5/17/91	7/17/91	Net	150 Kw
		Photovoltaic	Solar Energy	10/15/98	11/1/98	Net	2 Kw
		Cogenerator	Natural Gas	11/15/97	12/1/97	Net	5 Kw
		Cogenerator	Propane Gas	5/20/98	6/15/98	Net	5 Kw
		Photovoltaic	Solar Energy	11/1/98	12/15/99	Net	2 Kw
		Water Turbine	Hydro Power	NA	12/1/82	Net	225 Kw

Information Request DOER-1-2

Please provide any data used to ascertain the impact of existing installed distributed generation ("DG") when determining the appropriateness of the proposed standby rates. Please include in your response any data that demonstrates the amount of on-site generation installed in the Company's area by service territory, any estimates of reduced sales, and any estimates of increased costs.

Response

Please refer to the response to Information Request DOER-1-1, which sets forth estimates of the lost sales and revenue associated with installed on-site generators. Increased costs associated with such on-site generation would arise when distribution upgrades are moved up in time as a result of the on-site generation load being added to the local distribution load forecast. These costs are the same as those incurred for a non-standby customer who adds load to the existing system.

Information Request DOER-1-3

Please provide any data used to ascertain the impact of future installed DG when determining the appropriateness of the proposed standby rates. Please include in your response any data that demonstrates the Company's forecast of new on-site generation expected to be installed in the Company's area by service territory, any estimates of reduced sales, and any estimates of increased costs.

Response

Please refer to the responses to Information Request DTE-2-3, Attachment DTE-2-3(b), Information Request DTE-3-1, Attachment DTE-3-1(b), and Information Request DTE-4-1, Attachment DTE-4-1(b). These schedules indicate the request for interconnection of on-site generators to the Companies' distribution systems. In addition, the Companies have had informal inquiries from customers contemplating the potential installation of on-site generation. Please the Companies' response to Information Request AG-1-22.

Information Request DOER-1-5

Referring to the above cited exhibit, on page 19 at lines 10-11, please provide data and work papers supporting the statement that the proportion of transmission costs that are unavoidable to the provision of standby delivery service is "relatively lower than for distribution plant because of the higher level of diversity between individual customer loads."

Response

Please refer to Attachment DTE-2-9, Attachment DTE-3-5 and Attachment DTE-4-6, which set forth coincident and non-coincident monthly loads for the rate classes eligible for the proposed standby rates. As set forth on these schedules, the coincident class loads are invariably smaller than the non-coincident class peak loads indicating more diversity. Similarly, class non-coincident peak loads would be smaller than the sum of individual customer loads for a rate class. In general, transmission system planners would incorporate coincident loads rather than individual customer loads when determining the adequacy of transmission capacity for existing customers.

Information Request DOER-1-6

Begin Referring again to page 19 at 11-14, please provide calculations and related work papers or accurate estimates and work papers of the levels of diversity between individual customer loads at the aggregate system level and the Company's distribution plant level.

Response

Please refer to Attachment DTE-2-9, Attachment DTE-3-5 and Attachment DTE-4-6, which set forth coincident and non-coincident monthly loads for the rate classes eligible for the proposed standby rates. As set forth on these schedules, the coincident class loads are invariably smaller than the non-coincident class peak loads indicating more diversity. Similarly, class non-coincident peak loads would be smaller than the sum of individual customer loads for a rate class.

Information Request DOER-1-7

Please provide data and work papers used to support the assertion made on page 19 at line 14 that "there is no diversity factor for standby service that would be appropriate for a few DG customers."

Response

The statement refers to the fact that it is unlikely that more than one DG customer over the size threshold set forth in the proposed tariffs would reside on any one distribution circuit. Consequently, distribution planners could not currently rely on diversity among several on-site generators when planning capacity for any one particular distribution circuit.

Information Request DOER-1-8

Please provide information, including generator location, size, and annual outputs throughout the lifetime of the generator, on all on-site generation installed currently in the Company's service territories with a combined nameplate rating greater than 60 kW.

Response

Please see the responses to Information Requests DTE-2-1, DTE-3-1, DTE-4-1 and DOER-1-1.

Information Request DOER-1-9

Please provide an organized tabulation of proposed Standby Service charges for all NSTAR companies (Boston Edison, Cambridge Electric, & Commonwealth).

Response

Please see Attachment DOER-1-9 (a), Attachment DOER-1-9 (b), Attachment DOER-1-9 (c) and Attachment DOER-1-9 (d).

Attachment DOER-1-9(a)

Boston Edison Company	**Rate SB-G-3**	**Rate SB-G-2**
Customer Charge	$237.00 per month	$18.19 per month
Distribution (Demand) (Based on Contract Demand)		
October to May	$5.58 per kilowatt	(>10 kW) $12.42 per kilowatt
June to September	$11.66 per kilowatt	(>10 kW) $24.26 per kilowatt
Transmission	No charge	No charge
Transition	No charge	No charge
Supplemental Delivery Service (above contract demand level)		
Customer Charge	No charge	No charge
Distribution (Demand)		
October to May	$5.58 per kilowatt	(>10 kW) $12.42 per kilowatt
June to September	$11.66 per kilowatt	(>10 kW) $24.26 per kilowatt
Transition (Demand)		
October to May	$1.85 per kilowatt	Not applicable
June to September	$6.62 per kilowatt	Not applicable
Transition (Energy)		
Peak Hours Use		First 2,000 kWh
October to May	1.584 cents per kilowatt-hour	3.942 cents per kilowatt-hour
June to September	2.707 cents per kilowatt-hour	9.774 cents per kilowatt-hour
Off-Peak Hours Use		Next 150 hours use of the billing kW
October to May	0.380 cents per kilowatt-hour	0.959 cents per kilowatt-hour
June to September	0.707 cents per kilowatt-hour	1.940 cents per kilowatt-hour
		Each Additional kWh
October to May	Not applicable	No charge
June to September	Not applicable	0.351 cents per kilowatt-hour
Transmission (Demand) Peak	$2.54 per kilowatt	
Off-Peak	$2.54 per kilowatt	

Attachment DOER-1-9(b)

Boston Edison Company	**SB-T2 October – May**	**SB-T2 June - September**
Customer Charge		
Annual max billing kW 150	427.77 per month	427.77 per month
Annual max billing kW >150 and 300	$114.62 per month	$114.62 per month
Annual max billing kW >300 and 1000	$166.67 per month	$166.67 per month
Annual max billing kW >1000	$374.57 per month	$374.57 per month
Distribution (Demand) (Based on Contract Demand)	$8.18 per kilowatt	$17.51 per kilowatt
Transmission	No charge	No charge
Transition	No charge	No charge
Supplemental Delivery Service (above contract demand level)		
Customer Charge	No charge	No charge
Distribution (Demand)	$8.18 per kilowatt	$17.51 per kilowatt
Transition (Demand)	$0.92 per kilowatt	$4.77 per kilowatt
Transition (Energy)		
Peak Hours Use	1.825 cents per kilowatt-hour	3.051 cents per kilowatt-hour
Off-Peak Hours Use	0.502 cents per kilowatt-hour	0.844 cents per kilowatt-hour
Transmission (Demand)	$2.44 per kilowatt	$2.44 per kilowatt

Attachment DOER-1-9(c)

Cambridge Electric Light Company	**Rate SB-G-3**	**Rate SB-G-2**
Customer Charge	$90.00 per month	$90.00 per month
Distribution (Demand) (Based on Contract Demand)		
First 100 kilovolt-amperes	No charge	$2.98 per kilovolt-ampere
Over 100 kilovolt-amperes	$1.47 per kilovolt ampere	$3.95 per kilovolt-ampere
Transmission	No charge	No charge
Transition	No charge	No charge
Supplemental Delivery Service (above contract demand level)		
Customer Charge	No charge	No charge
Distribution (Demand)		
First 100 kilovolt-amperes	No charge	$2.98 per kilovolt-ampere
Over 100 kilovolt-amperes	$12.47 per kilovolt-ampere	$3.95 per kilovolt-ampere
Transition (Demand)		$1.35 per kilovolt-ampere
First 100 kilovolt-amperes	$156.00	Not applicable
Over 100 kilovolt-amperes	$1.56 per kilovolt-ampere	Not applicable
Transition (Energy)		
Peak Load Period	Not applicable	0.162 cents per kilowatt-hour
Low Load Period A	Not applicable	No charge
Low Load Period B	Not applicable	No charge
Transmission (Demand)		
First 100 kilovolt-amperes	$464	$4.50 per kilovolt-ampere
Over 100 kilovolt amperes	$3.94 per kilovolt-ampere	$6.24 per kilovolt-ampere

Attachment DOER-1-9(d)

Commonwealth Electric Company	**Rate SB-G-3**	**Rate SB-G-2**
Customer Charge	$900.00 per month	$360.13 per month
Distribution (Demand) (Based on Contract Demand)		
Distribution Charge	$3.00 per kilovolt-ampere	$4.97 per kilovolt-ampere
Transmission	No charge	No charge
Transition	No charge	No charge
Supplemental Delivery Service (above contract demand level)		
Customer Charge	No charge	No charge
Distribution Charge	$3.00 per kilovolt-ampere	$4.97 per kilovolt-ampere
Transmission (Demand)	$2.54 per kilovolt-ampere	$1.56 per kilovolt-ampere
Transmission (Energy)		0.233 cents per kilowatt-hour
Transition (Demand)	$1.99 per kilovolt-ampere	
Transition (Energy)		1.855 cents per kilowatt-hour
Peak Load Period	1.646 cents per kilowatt-hour	
Low Load Period A	1.425 cents per kilowatt-hour	
Low Load Period B	1.187 cents per kilowatt-hour	

Information Request DOER-1-10

Please provide the Company's position as to their willingness to provide standby service at a lower price for on-site generators that perform at a threshold capacity factor of, for example, greater than 80% or prices as a function of the DG's historic performance levels.

Response

The cost of providing standby service is less a function of the on-site generator's capacity factor as it is a function of its connection to the distribution system itself. Whether the on-site generator has one day of outage in a year or 150 days of outage, the distribution system must have capacity to serve the load placed on the system during the outage period, whenever that may occur. Only when the company has physical assurance that the load will not be relying on the distribution system, i.e., interruptible load, can lower prices be justified.

Information Request DOER-1-11

Please explain the reasoning behind the determination of 60kW as the generation nameplate rating threshold for application of the proposed rates. Also, please provide all relevant work papers.

Response

Consistent with the requirements of the Restructuring Act, the 60 kW standard has been previously set as a legal threshold for on-site generation under the Department's QF regulations and for net metering. See, e.g., G.L. c. 164, § 1G(g); 220 C.M.R. §§ 8.02, 8.04 (8). Thus, the Legislature and the Department have already established 60 kW as an appropriate size threshold for different policies with respect to on-site generation. Please also refer to response to Information Request DTE-2-12.

Information Request DOER-1-12

For Cambridge Electric, does the 60 kW threshold represent a change from the threshold rating in current Cambridge Electric Rates? If so, please provide any work papers and an explanation for this change, denoting the specific rates that are closed by this filing.

Response

Yes, the current Cambridge standby rates (Rate SB-1, MS-1 and SS-1) are applicable to customers taking service at 13.8 kV with internal generation of at least 100 kVA that provides at least 20 percent of the customer's maximum internal load. Cambridge's proposed rate would apply to customers at each of 13.8 kV, primary or secondary voltage levels who install on-site generation of 60 kW or more. Customers who install on-site generation of less than 60 kW are eligible for net metering under the Company's QF rate, Rate P-2. The change in availability from the current standby rates is intended to expand the availability of standby service tariffs to the otherwise applicable rate schedules and to ensure a consistent policy with regard to rate design for standby service. Please see the response to Information Request DTE-3-8 and DTE-2-12.

Information Request DOER-1-13

Setting aside the provision that current standby-service customers will stay on their current rates, please compare current standby rates customers' bills under current rates to the same customers' bills under the proposed rates.

Response

Please see the supplemental responses to be filed in response to Information Requests AG-1-19 and AG-1-20.

Information Request DOER-1-14

Please provide a forecast of growth in standby service in NSTAR's territory. If no forecast exists, please explain the statement in Exhibit NSTAR-HCL-1, on page 8 at lines 11-12 that, "DG...is expected to increase its impact, where economically and technologically feasible."

Response

NSTAR Electric does not have a forecast of growth in standby service in its service territory. However, there has been an increase in inquiries from customers potentially interested in on-site generation. NSTAR Electric is also aware of a significant increase in marketing activity on the part of DG manufacturers and distributors.

Information Request DOER-1-15

As per testimony in Exhibit NSTAR-HCL-1, page 15 at lines 16 – 20, please provide a listing of those areas in NSTAR's territory that are "dedicated to serve the peak needs of certain customers," versus those areas where "transmission facilities are shared among many customers."

Response

The testimony is intended to describe the general characteristics of a distribution system as compared to a transmission system. Distribution systems are typically operated in radial fashion over individual circuits emanating from common substation hubs. The substation hubs are interconnected by high voltage transmission line networks. Accordingly, the radial branches of a distribution system serve relatively few customers while the transmission network delivers bulk power to many substations, and ultimate customers at the end of the radial distribution lines.

Information Request DOER-1-16

Is it likely or unlikely that the application of the proposed rates will increasingly shift costs from non-standby-service customers to standby-service customers?

Response

Consistent with designing rates based on cost incurrence, the application of the proposed rates will allow the Company to recover distribution-related costs from both standby and all-requirements customers on an equitable and equivalent basis.

Information Request DOER-1-17

Do the current NSTAR non-standby-rates accurately distinguish between costs that vary by usage and those that are usage-sensitive? That is, do the fixed rate components of such rates reflect fixed costs of providing service and do the variable components reflect variable costs?

Response

Yes, to some degree. Generally, the fixed rate components (customer charges and monthly demand charges) tend to recover fixed costs and the variable rate components reflect variable costs imposed on the NSTAR Electric system. However, to a lesser extent, as part of the Department's rate-setting process and policies balancing notions of rate continuity, simplicity and efficiency, revenue requirement and rate design considerations sometimes require more or less costs to be recovered in the least elastic component of the Company's rates. Of course, the load characteristics and revenue stream from all-requirements customers (i.e., those without non-emergency self generation) permit more flexibility concerning rate design because the load on the system is directly linked to a customer's internal use of electricity. For standby customers with self-generation, the intermittent load on the distribution system is largely dependent on whether the self-generation facilities are operational. Nonetheless, the distribution system must be designed (and costs incurred by the distribution company) to serve the firm standby customer's load at any time.

Information Request DOER-1-18

What is the reasoning behind the closing of the existing Cambridge Electric standby-service rates? In what way(s) are they deficient?

Response

Cambridge Electric is proposing to close its standby-service rates to new customers because the Company believes that its proposed standby rates more accurately reflect the actual cost incurred by customers taking standby service. Under the current standby service, standby service customers do not pay the full cost that is incurred by the Company to provide standby service, resulting in a subsidy of standby service customers by other all-requirements customers.

Information Request DOER-1-19

Why are existing standby-service customers grandfathered, yet existing non-standby-service customers are subject to changes? That is, don't non-standby-service customers make investment decisions based on the Company's then-existing tariffs?

Response

The standby tariffs proposed in this proceeding are new, and not merely a change in the charges for effective standby rate structures. Decisions of existing self-generation customers were made without prior notice of the new proposed standby rates. Although there is no legal expectation that rate designs will be maintained indefinitely, it is appropriate to grandfather customers who made self-generation investment decisions in the past without notice of the new standby rates. Customers who have not yet made an investment in self-generation do not need to be grandfathered in order to support a previous decision to invest in self-generation. There can be no legitimate equity argument about "unfairness" or lack of notice when rates change in the future under this proposed rate design.

Information Request DOER-1-20

Do current non-standby rates feature an "appropriate" (as used in Exhibit NSTAR-HCL-1, page 11, lines 14 –15) level of cross-subsidization of costs among customers? If so, please specify which rate classes pay more than the costs they cause, and which pay less, and by how much each rate class subsidizes or is subsidized by other rate classes.

Response

It is impossible to specify precise levels of interclass subsidization without conducting an allocated cost-of-service study. Rates established by the Department are designed to comport to a number of often-conflicting rate-structure objectives. See Boston Edison Company, D.P.U. 1720, at 112-120 (1984). Accordingly, distribution rates often do not reflect equal percentage rates of return. See New England Telephone and Telegraph Company, D.P.U. 92-100, at 9 (1992). Moreover, as described in response to Information Request AG-1-4, current distribution rates were unbundled in accordance with the Department's directives in D.T.E. 97-100 and the Restructuring Act. As described in Exhibit NSTAR-HCL-1, at 16-17, the proposed standby rate design and rates primarily were based on the existing distribution and transmission tariff rates for a comparable non-standby customer who otherwise purchases all of its electricity from either the Company or a third-party supplier. This approach ensures that the rates for standby customers are set in accordance with the corresponding rates for other customers and are consistent with traditional ratemaking principles.

Information Request DOER-1-21

Does the avoidance of transmission, transition, DSM, and renewable charge represent an accurate accounting of the actual avoided costs due to distributed generation facilities? If so, does this mean that if customers pay this rate, then there will be neither an over collection nor an under collection of costs to serve standby-service customers as a group or individually?

Response

The intent of the standby rates is to ensure the collection of distribution and transmission costs associated with incurring costs to serve standby customers. The transition, DSM and renewables charges are administratively determined and do not reflect normal cost-causation principles. Accordingly, there are no "avoided costs" associated with these administratively determined charges.

Information Request DOER-1-22

Are avoided costs, as accounted for in the proposed rates, the only benefits to investment in DG facilities in NSTAR's service territory? That is, do the proposed rates imply that there are no distribution-related costs avoidable due to use of DG?

Response

Since the Company must ensure that adequate capacity exists in the distribution system to serve the load requirements of DG customers when the on-site generation is out of service, there is no distribution capacity savings benefit from the installation of such on-site generation. See e.g., Response to Information Request NEDGC-2-3. From an energy perspective, the potential for reduced load on the distribution system resulting from on-site generation could provide savings in energy losses. Such savings accrue to all customers through reduced energy supply costs. Energy supply costs are not a distribution function and any allocation of benefits from reduced energy losses are properly administered by the energy suppliers.

Information Request DOER-1-23

Please provide the rate sheets for all customers requiring non-firm standby service.

Response

If the term "rate sheets" is meant to refer to tariffs filed and approved by the Department, the Company has not proposed "rate sheets" for customers requesting non-firm standby service. It is contemplated that non-firm standby service would likely be provided under special contract. See Exhibit NSTAR-HCL-1, at 26-27.